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ABSTRACT

The Opinionnaire on Political Institutions and Participation (OPIP) was designed to measure six dimensions of the overall construct of political attitude. Three studies were undertaken to determine the validity and reliability of the instrument, and the OPIP was found to be a valid and reliable instrument for research and evaluations using multi-subject designs. Validation and cross-validation studies indicated that the instrument was construct valid for measuring political attitudes. Reliability studies indicated that overall test-pretest and internal consistency were moderately high. Studies of the reliability of the six subtests indicated that test-retest and internal consistency ranged from moderate to low. (Author)

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VALIDATION OF AN INSTRUMENT TO MEASURE POLITICAL ATTITUDES

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Abstract

The Opinionnaire on Political Institutions and Participation (OPIP) was designed to measure six dimensions of the overall construct of political attitude. Three studies were undertaken to determine the validity and reliability of the instrument, and the OPIP was found to be a valid and reliable instrument for research and evaluations using multi-subject designs. Validation and cross-validation studies indicated that the instrument was construct valid for measuring political attitudes. Reliability studies indicated that overall test-retest and internal consistency were moderately high. Studies of the reliability of the six subtests indicated that test-retest and internal consistency ranged from moderate to low.

In a democratic republic it is logical that the educational system be expected not only to provide young citizens with political knowledge but also to foster attitudes supportive of the institutions and processes of democratic government. Consequently, political/citizenship education has been a main priority of the social studies curriculum in the U.S. since its inception in the public schools around the turn of the century. The importance of attitudinal outcomes of citizenship education in the schools has been underscored recently by the objectives of several federally funded national assessments of American youth (National Assessment of Educational Progress, 1973; 1978). Clearly implied by the assessments is the obligation of the schools to promote attitudes favoring democratic principles and participation in political processes. Consequently, curriculum directors, social studies teachers, and educational researchers must attend to

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the practical concerns of effective measurement of the political/citizenship attitudes of students.

In the last two decades, researchers have expended a considerable amount of time and money studying the political attitudes of students and assessing the influence of various factors. Schooling clearly is one of the factors which contributes to the shaping of political attitudes (Adelson and O'Neil , 1966; Hess and Torney, 1967; Levenson, 1972; Weissburg, 1972; Torney, Oppenheim, and Farnen, 1975), but efforts to determine the extent and means of the school's influence have produced inconsistent results (Langton and Jennings, 1968; White, 1968; Jennings and Niemi, 1968; Ehman, 1969; Langton and Karns, 1969; Lyons, 1970; Rodgers, 1973; Woelfel, 1978). A considerable source of this inconsistency appears to be the instrumentation. The measures have been a mixed batch. The range and variety of their content have been nearly as great as the number of studies conducted. Most have been ad hoc measures prepared for a specific study and conceptualizing attitudes narrowly. Few of the instruments were designed or evaluated for purposes of establishing norms for future comparative studies or longitudinal research. It is the exception for a political attitude instrument to be reported adequately providing information about validity and reliability (see Torney, et, al., 1975, Chapters 7 and 8). Seldom has a political attitude instrument been evaluated for its potential for collecting empirical data of the breath and depth necessary for theory building.

The great majority of the political attitude instruments used with students have been two to seven-item Likert type measures which attempted to operationalize such constructs as political efficacy, political cynicism, citizen's duty, political interests, and tolerance for political dissent. Most were based on test items used with voting age adults in national election survey research. A good example of the problem of quality and consistency of measurement is seen in the use of the Political Efficacy Scale. Political

efficacy, (i.e. the feeling that the individual has some political influence) is probably the most extensively measured political attitude. Developed as a five-item scale by Campbell, Gurin, and Miller (1954) for use with national surveys of adults, the Political Efficacy Scale was adapted in multiple variations of content and length for studies with students throughout the sixties and seventies. Results of these studies formed many of the existing assumptions about the political attitudes of students, and it was not until the mid-seventies that the short, quickly-constructed, often unpiloted instruments were criticized for low reliability, lack of construct validity or unidimensionality, and failure to test political efficacy as it relates to students (see Stentz and Lambert, 1977 for a thorough critical review of the use of the Political Efficacy Scale with students).

On the other hand, a few political socialization researchers were attempting to develop more effective instruments for measuring student political attitudes. Notable is the work of Torney, Oppenheim, and Farnen (1975) which provided several carefully constructed attitude instruments and valuable analyses on which this study has drawn. However, the items in their their series of attitude tests were limited to cross-national commonalities in educational objectives. Those limitations and the need for a single instrument to be used in the time confines of one school class period prompted the development of a new instrument.

The purpose of this paper is to report the development and initial validation of the Opinionnaire on Political Institutions and Participation (OPIP). The OPIP was originally intended as a measure of student outcomes for the Improving Citizenship Education Project, a K-12 curriculum improve- program in the Fulton County (Georgia) School System (see Hepburn, 1979).

Validation studies, however, were conducted in order to determine the appropriateness of the instrument for general use in measuring student political attitudes, and thus the studies contributed an additional measure of the dependent construct "political attitude" for use by researchers and evaluators.

Development of the Measurement Instrument

The Opinionnaire on Political Institutions and Participation (OPIP) is a 48-item instrument with six subtests each containing eight items. The OPIP is a multi-dimensional instrument covering a broad range of attitudes about political institutions and participation (Table 1).

The first and second subtests cover attitudes toward two dimensions of political institutions. Subtest 1, termed Others and Political Institutions, measures the respondent's perception of how people generally should view American political institutions. Subtest 2, termed Self and Political Institutions, measures the respondent's attitude toward American political institutions.

The third and fourth subtests cover two dimensions of participation in the public political process. Subtest 3, termed Others Participation in the Political Process, measures the respondent's perception of how people in general should participate in the public political process. Subtest 4, termed Self Participation in the Political Process, measures the respondent's attitude toward personal participation in the American political process.

The fifth and sixth subtests cover two dimensions of participation in the school political process. Subtest 5, termed Others Participation

in School Political Process, measures the respondent's perception of how others should participate in the political activities of the school. Subtest 6, termed Self Participation in School Political Process, measures the respondent's attitude toward personal participation in the school political process.

Development of a multi-dimensional instrument was suggested by the findings and discussions of prior research. First, an instrument that includes items on political institutions as well as political participation was suggested by the National Assessment of Educational Progress Studies (1973; 1978) and Torney et. al. (1975). Second, the construct "political participation" was broadened beyond participation in the public political process to include school political participation based on the ideas of Entwistle (1971) and the research of Ehman and Gillespie (1974). Finally, the I/Other dichotomy in the political attitudes of students was included the OPIP because a number of studies (Hess and Torney, 1967; Levenson, 1972; Wittes, 1972; Torney et. al., 1975) indicated the likelihood of differences between attitudes toward general participation and attitudes towards personal attitudes.

Eight political concept areas guided the development of items in the first and second subtest on political institutions. The eight concept areas were governmental power, law making, electoral politics, civil liberties, political ethics representation, political efficacy, and global politics. Four concept areas related to political processes guided the development of the third and fourth subtests on general political participation. These concept areas were: electoral politics, civil liberties, justice, and citizen action. The fifth and sixth subtests were based on four concept

areas related to school political participation: decision making, representation, justice, and individual rights. The broad national objectives for citizenship education defined by the National Assessment of Educational Progress (1976) were a major influence on the selection of concept areas. Table 1 presents the items of both the elementary and secondary forms of the OPIP by subtest.

The secondary and elementary forms of the OPIP are parallel (see Table 1), but the elementary form presents attitude statements more simply and has a less complex answering format. Some of the statements on the OPIP are worded positively and others are worded negatively. The decision to use positive or negative statements was decided by coin flip of each statement. On the secondary form, individuals respond to the 48 statements on a 5-point scale by circling one of these answers: Strongly Agree, Agree, Uncertain, Disagree, or Strongly Disagree. On the elementary form individuals respond to the 48 statements on a three-point scale by circling one of these answers: Agree, Uncertain, or Disagree. The major difference between the two forms is in the reading level of the statements and the response format.

In these studies, items from both forms of the OPIP were scored using a three-point scale so that factor analysis could be done and comparisons could be made across grade levels of students. Hence, for the analysis of the secondary form the Strongly Agree and Agree answers were collapsed and scored the same, and Strongly Disagree and Disagree answers were collapsed and scored the same. Thus the overall scores on either form of the OPIP could range from 48 (very low) to 144 (very high) attitude toward political institutions and participation. Each of the six subtests scores from OPIP could range from 8 (very low) to 24 (very high). Each attitude statement

Table 1

Items on Opinionnaire on Political Institutions and Participation

Subtest 1: Others and Political Institutions

(Item 1): People should have a say about what government does.
(People should have a say about what the government does.)

(Item 26): The government should have the right to control all the affairs of its citizens.
(The President should have the right to control all the behavior of the people.)

(Item 3): Compromising should not be a part of the law making process.
(Law-makers should not agree to do something for other Law-makers in order to get laws passed.)

(Item 28): The President of the United States should have the right to stop radio, television and newspapers from criticizing him.
(The President should have the right to stop the radio, television, and newspapers from saying bad things about him.)

(Item 5): Government Officials should not inform the public about the misconduct of fellow officials.
(People in Congress should not tell the people when the President is bad.)

(Item 30): Politics and government should be complicated enough to keep people from understanding what's going on.
(Government should be so hard to understand that people will not know what is going on.)

(Item 7): Party membership should be the most important consideration in deciding for whom to vote.
(People who are Democrats should always vote for Democrats.)

(Item 32): The U.S. should give economic help to the poorer countries of the world even if they can't repay.
(The United States should give help to poor countries even if the poor countries cannot return the favor.)

Subtest 2: Self and Political Institutions

(Item 25): I would go to a county/city council meeting about rezoning land uses.
(I would go to a meeting about how the land is used.)

(Item 2): If I were the President, I would want to control everything people are doing.
(If I were the President, I would want to control everything people are doing.)

(Item 27): If I were involved in making a new law, I would agree to do something for another person in order to get the law passed.
(If I were involved in making a new law, I would agree to do something for another person in order to get the law passed.)

(Item 4): If I were a government official, I would not try to control what the radio, television, or newspapers say about me.
(If I were the President, I would not try to control what the radio, television, or newspapers say about me.)

(Item 29): If I were a government official, I would not tell on a fellow official who might be doing something wrong.
(If I were the Governor, I would not tell on people in Congress who might be doing something bad.)

(Item 6): If I were a politician, I would not want people to know what's going on
(If I were the Mayor of Atlanta, I would not want people to know what was going on in my community.)

(Item 31): I would vote for a friend no matter what my friend felt about the issues.
(I would vote for a friend no matter what my friend felt about what the government should do.)

(Item 8): I would not give away any more of our wealth to help foreign countries.
(I would not give away any more of our money to help other countries.)

Table 1--continued

Subtest 3: Others Participation in Political Process

(Item 9): Some people should not be allowed to vote in elections because these people are not smart enough.
(Some people should not be allowed to vote in elections because these people are not smart enough.)

(Item 33): A man campaigning on television for candidates of the American Nazi Party should have the right to do so.
(A person should be able to speak for some idea no matter what the idea is.)

(Item 17): Some people should be given special treatment by government because they have more money.
(Some people should be given special treatment by the President because they have more money.)

(Item 41): People who are arrested for a crime should have to prove themselves innocent.
(People who are arrested for a crime should have to prove that they did not do it.)

(Item 11): People should vote even when they think their political party doesn't have a chance to win.
(People should vote even when they think their choice for President does not have a chance to win.)

(Item 35): People should not criticize the representatives, it only interrupts the representatives' work.
(People should not talk badly about Law-makers, it only hurts the Law-makers' work.)

(Item 19): Every person should give some of his/her time for the good of the community.
(Every person should give some of his/her time for the good of the community.)

(Item 43): People should be willing to serve on juries.
(People should be willing to serve on a jury to decide if a person broke the law.)

Subtest 4: Self Participation in Political Process

(Item 24): If I had the political power, I would not let anyone speak badly about the U.S. government.
(If I were the President, I would not let anyone speak badly about the United States government.)

(Item 48): If I could, I would stop people from campaigning for changes in government that I did not like.
(If I could, I would stop people from asking others to vote for changes in our government that I did not like.)

(Item 10): If I were rich, I would want the government to give me special treatment.
(If I were rich, I would want the Governor to give me special treatment.)

(Item 34): If I were arrested by the police, I would want to be considered innocent until proven guilty.
(If I were arrested by the police, I would want the police to consider that I did not break a law until they prove I did.)

(Item 18): I would not vote in an election unless I thought the candidate I liked would win.
(I would not vote in an election unless I thought the person I liked would win.)

(Item 42): If I were a congressional representative, I would like criticism of my work from people.
(If I were the President, I would like the people to tell me how I was doing.)

(Item 12): I would not work in a political campaign, it is too time consuming.
(I would not work to help a person I like to become President, it takes up too much time.)

(Item 36): If I were called for jury duty, I would not like to waste my time serving.
(If I were asked to decide if a person broke the law, I would not like to waste my time doing it.)

Table 1--continued

Subtest 5: Others Participation in School Political Process

(Item 13): Students should not have any influence in making school rules.
(Students should not have any part in making school rules.)

(Item 37): Students should be involved in school decision-making processes.
(Students should be involved in making school decisions.)

(Item 21): A student council should have some authority in making rules about student behavior.
(A student council should have some sya so in making rules about how people behave in school.)

(Item 45): Students should join clubs, school student councils, and other school student organizations.)
(Students should join school clubs and student councils.)

(Item 15): Students should be considered guilty by a school principal until proven innocent.
(Students should be considered to have broken a school rule until students show they have not done it.)

(Item 39): Students should not be punished for breaking school rules.
(Students should not be punished for breaking school rules.)

(Item 23): Students shouldn't be allowed to speak out against a school rule.
(Students should not be allowed to speak out against a school rule.)

(Item 47): Students should have the opportunity to publish their own newspaper.
(Students should have the chance to write their own newspaper.)

Subtest 6: Self Participation in School Political Process

(Item 20): I would like to be more involved in making rules about student behavior in school.
(I would like to be more involved in making rules for how people behave in school.)

(Item 44): I would enjoy being involved in making school decisions.
(I would enjoy being involved in making school decisions.)

(Item 14): If I got together with some other students like me, we would have a lot of influence on what rules were made for the school.
(If I got together with some other students like me, we would have a lot of say so on what rules were made for our school.)

(Item 38): I would not join a school club or student council.
(I would not join a school club or student council).

(Item 22): If I were a school principal, I would consider a student innocent until proven guilty.
(If I were a school principal, I would believe a student did not break a rule until it is proven that the student did the crime.)

(Item 46): If a friend broke a school rule, I would try to help that student get away with it.
(If a friend broke a school rule, I would try to help that student get away with it.)

(Item 16): If I disagree with a school rule, I would not be allowed to speak out against it
(If I disagree with a school rule, I would not be able to speak out against it.)

(Item 40): It would be a waste of my time to try to get a rule changed in my school.
(It would be a waste of my time to try to get a rule changed in my school.)

NOTE: Statements in parentheses are the statements found on the elementary form.

was scored 1 (negative), 2 (neutral) or 3 (positive). The score values assigned to each statement were based on the judgment of the developers, review by political educators, and the results of a pilot study of the instrument conducted prior to the first validity study.

Validation Procedures

The construct validity of the OPIP was examined in two studies--a validation study and a cross-validation study. In addition the internal consistency of the instrument was also studied in these validation studies. A third study examined the test-retest reliability of the instrument.

The construct validity studies involved examination of the theoretical operations of the instrument. It was hypothesized that the OPIP would:

1. produce one factor among the subtests;
2. produce subtests with unique factors;
3. produce differences in attitude between grade levels;
4. produce differences in attitude between subtests;
5. produce moderate correlation with knowledge of political institutions and participation.

The reliability studies involved examining the overall test-retest correlations of the OPIP, and the test-retest correlations of the subtests. In addition, internal consistencies of the overall instrument and the subtests were examined using the Spearman-Brown Prophecy formula for split-half correlations.

Subjects

Subjects for all three studies were drawn from a large metropolitan school system in the southeast. This school system contained a student

population with a variety of socio-economic statuses. The student population was about 50 percent male and 50 percent female. The racial breakdown was about 75 percent white and 25 percent black.

In the two validity studies, classes were randomly selected from the third grade, eighth grade, and twelfth grade in schools selected as representative of the district's socio-economic distribution. These grade levels were selected because they represented the typical top grade level for primary, middle, and secondary grades. For the reliability study, students were from classes of teachers who volunteered to give the two administrations of the test instrument. These latter classes were from various primary, middle, and secondary grades of the same schools used in the validity studies.

In the first construct validity study, 515 subjects were used. There were 133 third graders, 169 eighth graders, and 213 twelfth graders. Overall, 48 percent were males and 52 percent were females. Also, 90 percent were white and 10 percent were black.

In the second construct validity study, 920 subjects were used. There were 321 third graders, 319 eighth graders, and 280 twelfth graders. Overall, 51 percent were males and 49 percent were females. Also, 78 percent were white and 22 percent were black.

In the test-retest reliability study, 1080 students were tested. These students included 10% of those in the second validity study. There were 360 primary grade students, 304 middle school students, and 416 secondary students. Overall, 50 percent were males and 50 percent were female. Also, 78 percent were white and 22 percent black.

Data Collection

The OPIP was administered to the 515 students in the first validity study in March of the school year. The knowledge measure used in the validity study was administered one day prior to the OPIP. The knowledge measure used was the Citizenship Knowledge Test which has both a secondary form and an elementary form. The validity and reliability data for both forms of the Citizenship Knowledge Test were reported elsewhere (Hepburn and Strickland, 1979).

The OPIP was administered to the 920 students in the second validity study a year later in March. The Citizenship Knowledge Test was again used, and it was given the day prior to the OPIP.

In both validity studies, the measurement instruments were administered through the school system by classroom teachers. In the primary grade classes, teachers read the measurement instruments to their students. Because it was not administratively possible to obtain makeup test data from absent students, students who took the OPIP but did not take the knowledge test were treated as missing data in the correlation of the OPIP scores with knowledge scores.

For the test-retest reliability study the OPIP was administered to the 1080 subjects in March of the same school year as the second validity study and again 10 weeks later in May. Only those students present at both administrations of the OPIP (1080) were used in the study because it was administratively impossible to collect data on absent students.

Results

Validity Studies

Factor analysis results. The first step in analyzing the data from the two validity studies was to determine 1) if there was one factor common

to the six subtests, and 2) if there were unique factors associated with the six subtests. To find answers to these questions, factor analysis was used. The factor analysis procedure employed was Principle Factoring with Iteration using Oblique rotation (Nie, Hull, Jenkins, Steinbrenner and Bent, 1975). The results of the factor analysis of the data from the first and second validity studies is presented in Table 2. These results indicated that there was only one factor common to the six subtests in both validity studies so no rotations were required. The one factor, Political Attitude, accounted for 48 percent of the variance in the first validity study and 40 percent of the variance in the second validity study. The remaining variance was made up of the unique factors related to the individual subtests.

Analysis of variance results. The second step in analyzing the data from the two validity studies involved examining these questions: 1) Were there differences between grade levels on overall OPIP scores? and 2) Were there differences between subtest scores on the OPIP? These two questions were studied using analysis of variance for repeated measures procedures on the mean scores presented in Table 3. The analysis of variance test results on the data from the two validity studies is given in Table 4. The analysis of variance test results demonstrate that there was a significant ($p < .05$) difference between Grade Level means and a significant difference between overall Subtest means (Table 4).

Because the analysis of variance test only indicated differences between the highest and lowest mean, Newmann-Keuls' Sequential Range Test procedures were used to test all pairs (Bruning and Kintz, 1978). It was noted that the difference between Grade Level means was applicable to all pairs of

Table 2

Factor Analysis Results for Two Validity Studies

Subtest	First Validity Study		Second Validity Study	
	Factor	Commonality	Factor	Commonality
1. Others & Political Institutions	.74	.55	.62	.39
2. Self & Political Institutions	.65	.42	.54	.29
3. Others Participation in Political Process	.66	.44	.62	.39
4. Self Participation in Political Process	.79	.62	.77	.59
5. Others Participation in School Political Process	.76	.58	.68	.46
6. Self Participation in School Political Process	.52	.27	.53	.28
	Eigenvalue	2.88 (48%)	Eigenvalue	2.40 (40%)

Table 3

Means and Standard Deviations for First and Second Validity Studies

Subtest		First Validity Study				Second Validity Study			
		3rd grade	8th grade	12th grade	Combined	3rd grade	8th grade	12th grade	Combined
1. Others & Political Institutions	Mean	17.6	19.6	21.2	19.5	17.9	19.8	21.1	19.6
	S.D.	2.6	2.6	2.1	2.8	2.4	2.6	2.1	2.7
2. Self & Political Institutions	Mean	17.4	19.1	19.8	18.8	18.6	19.5	20.0	19.3
	S.D.	2.5	2.3	2.2	2.5	2.8	2.3	2.3	2.6
3. Others Participation in Political Process	Mean	17.9	20.1	21.1	19.7	18.5	19.9	20.7	19.7
	S.D.	2.3	1.9	2.0	2.4	2.2	2.1	2.2	2.3
4. Self Participation in Political Process	Mean	17.7	20.3	21.4	19.8	18.6	20.1	21.0	19.9
	S.D.	2.9	2.3	2.3	2.8	2.4	2.4	2.3	2.6
5. Others Participation in School Political Process	Mean	17.8	21.5	22.6	20.6	18.2	21.4	22.7	20.7
	S.D.	2.8	2.5	1.8	3.0	2.9	2.6	1.8	3.1
6. Self Participation in School Political Process	Mean	18.5	20.2	20.2	19.6	18.8	19.7	20.4	19.7
	S.D.	2.5	2.6	2.5	2.7	2.6	2.6	2.4	2.6
OVERALL	Mean	106.9	120.8	126.3	118.0	110.6	120.4	125.9	118.9
	S.D.	10.1	9.7	8.8	12.3	9.2	9.9	8.7	11.2

comparisons in both validity studies. That is, third graders scored lower than eighth graders and twelfth graders, and eighth graders scored lower than twelfth graders.

When comparing means for all pairs of combined Subtest scores in the first validity study (Table 3) the subtest Self and Political Institutions was significantly lower than all other subtest means, and the subtest Others Participation in School Political Process was significantly higher than all the other subtest means. All other mean comparisons in the first validity study were not significant. Again, comparing means for all pairs of combined subtest scores in the second validity study, the subtest Others Participation in School Political Process was significantly higher than any other subtest mean (Table 3). However, subtest Self and Political Institutions was significantly lower than only two other subtest means, Self Participation in School Political Process and Self Participation in Political Process. All other mean comparisons in the second validity study were not significant.

The significant interaction between Grade Levels and Subtests (Table 4) indicated that the overall findings for combined scores did not generalize to the differences between Grade Levels for each Subtest and/or between Subtests at each Grade Levels. Therefore, further post hoc analyses were conducted using the Newmann-Keuls Sequential Range Test procedures.

The overall significant differences between Grade Levels were confirmed for each subtest in the first validity study except for differences between eighth and twelfth graders on the subtest Others Participation in School Political Process (Table 3). For the second validity study, there were differences between the three grade levels on all subtests (Table 3).

Table 4

Analysis of Variance for Repeated Measures on Scores From First and Second Validity Studies

	First Validity Study			Second Validity Study		
Source	d.f.	M.S.	F	d.f.	M.S.	F
Grade Levels	2	2794.88	187.70*	2	3132.99	217.26*
Subjects w/groups	512	14.89		917	14.42	
Subtests	5	173.19	45.56*	5	211.54	51.22*
Grade Level x Subtests	10	57.99	15.59*	10	110.69	26.80*
Subtest x subj. w/groups	2560	3.72		4585	4.13	
TOTAL	3089	7.66		5519	7.35	

*Significant at the $p < .001$ level

In the third grade scores for the first validity study, the subtest Self Participation in School Political Process was significantly higher than all other subtests. For the third grade scores for the second validity study, subtests Others Participation in Political Process and Others Participation in School Political Process were significantly lower than the other subtests. But, there were no other differences between subtests in either validity study.

In the eighth grade scores for the first validity study, subtest Others Participation in School Political Process was significantly higher than the other subtests. Also, the subtests Self and Political Institutions, and Others and Political Institutions were significantly lower than the other subtests. In the eighth grade scores for the second validity study, subtest Others Participation in School Political Process was significantly higher than the other subtests. In addition, Self and Political Institutions was significantly lower than Others and Political Institutions. However, there were no other significant differences.

For the twelfth grade scores for the first and second validity studies, Others Participation in School Political Process was significantly higher than the other subtests. Also, Self and Political Institutions was significantly lower than the other subtests. For the twelfth grade scores in the first validity study, Self Participation in Political Process subtest was also significantly lower than other subtests. For the twelfth grade scores in the second validity study Self Participation in School Political Process was significantly lower than the other subtests, and Others Participation in Political Process was significantly lower than Others and Political Institutions.

The differences between Grade Levels on Subtests observed in both validity studies appear logical. The progression from an almost neutral attitude on all subtests at third grade to higher attitude means in eighth and twelfth grades is consistent with the idea that with increased cognitive development there is increased intensity of political attitudes and ideological commitment (Adelson and O'Neil, 1966).

The differences between Subtests within Grade Levels is also logical. The fact that the third grade results indicate that these subjects rated subtests related to self higher is consistent with the idea that students at that young age do not form clear attitudes about more abstract political concepts. Rather, they respond to more concrete political concepts especially those within the realm of their personal experience.

The higher scores for both eighth and twelfth grades on the Others Participation in School Political Process subtest indicate that students at these grade levels felt that students generally should be active participants in the school decision-making process. This bears out similar findings by Ehman and Gillespie (1974) and the National Assessment of Educational Progress (1973). The low attitude scores of the eighth and twelfth graders on the Self and Political Institutions and Self and School subtests suggests that students felt that actually they did not have much influence in their schools or on other political institutions.

Overall, the results of the analysis of variance test and post hoc analysis tend to support the construct validity of the OPIP. First, the OPIP differentiates between different age groups. Second, the subtests of the OPIP differentiate between attitudes about different political institutions and participation in a logical manner.

Correlation Results. The third step in analyzing the data from the two validity studies involved correlation of overall OPIP scores with overall scores from the Citizenship Knowledge Test. For the first validity study, third grade scores correlated .64 (N=133); eighth grade scores correlated .51 (N=155); and twelfth grade scores correlated .45 (N=197). For the second validity study, third grade scores correlated .43 (N=309), eighth grade scores correlated .47 (N=299); and twelfth grade scores correlated .52 (N=246). Thus, the correlations were all significant but moderate. Knowledge of political institutions and participation was positively related to scores on the OPIP but did not account for more than 29 percent of the variance of any grade level scores on the OPIP.

Reliability Studies

Internal consistency results. The results of the split-half correlations corrected by the Spearman-Brown Prophecy formula are presented in Table 5. The overall internal consistency reliabilities for data from the first and second validity studies were moderately high. However, the internal consistency reliabilities from data from the subtests in both validity studies were low to moderate. These findings are consistent with the fact that the overall OPIP test has one factor, and most likely the subtests have the multidimensions (See discussion of concept areas of the subtests presented above). These results for all grade levels combined are similar to the separate internal consistencies presented in Table 5.

Test-retest results. The results of the test-retest correlations are also presented in Table 5. The overall test-retest correlation is moderate to moderately high. The test-retest correlations for the subtests range from moderate to moderately low. Given the small number of items in each

Table 5

Stability and Internal Consistency Reliability Data Overall and by Grade Level

	Test-Retest				Internal Consistency							
					First Validity Study				Second Validity Study			
	Overall	Primary grade	Middle grade	Secondary grade	Overall	3rd grade	8th grade	12th grade	Overall	3rd grade	8th grade	12th grade
Test	.78	.83	.73	.73	.85	.77	.81	.73	.82	.67	.78	.8[illegible]
Subtests:												
1. Other & Political Institutions	.59	.57	.47	.64	.53	.36	.46	.38	.54	.38	.51	.46
2. Self & Political Institutions	.40	.45	.31	.40	.30	.15	.27	.22	.35	.41	.26	.37
3. Others Participation in Political Process	.57	.57	.41	.58	.44	.26	.13	.31	.36	.30	.17	.35
4. Self Participation in Political Process	.63	.66	.59	.61	.58	.41	.48	.53	.38	.31	.41	.51
5. Others Participation in School Political Process	.63	.64	.59	.48	.67	.50	.49	.24	.66	.44	.52	.44
6. Self Participation in School Political Process	.56	.57	.54	.58	.46	.39	.43	.48	.40	.37	.36	.37

subtest these correlations were not unexpected. The test-retest correlations for all grade levels combined are also generally similar to the separate test-retest correlations presented in Table 5.

Conclusions

The results of the two validity studies indicate that the OPIP produced the five theoretical operations hypothesized: one factor among subtests, subtests with unique factors, differences in attitude between grade levels, differences in attitude between subtests, and moderate correlation with knowledge of political institutions and participation. Hence, the OPIP has construct validity.

Given the results of this validation study, experimental studies now seem warranted to determine if the OPIP is sensitive to changes in attitudes after exposure to experimental treatments. These experimental studies would be additional sources of evidence of construct validity.

It must be noted that the data in this present study indicate such experimental treatments must be long term and must not rely solely on content knowledge to change attitudes. It was observed that the mean differences between third and twelfth grade students ranged from 10 (first validity study) to 15 (second validity study) points. Thus it appears that short-term treatments are unlikely to cause significant change. Also, the observation that knowledge accounted for less than 29 percent of the variance of attitude scores implies that treatment must include more than mere exposure to information about political institutions and political participation.

The overall reliablity coefficients indicate that the OPIP produces stable data about subject performance. But, the use of the OPIP subtests should be limited to comparisons between groups because of the moderate to moderately low reliability coefficients.

In summary, the results of the validation study indicate that although the Opinionnaire on Political Institutions and Participation is not appropriate for diagnosing attitudes of individuals, it is an effective and appropriate instrument for measuring political attitudes in research or evaluation using multi-subject designs.

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